

CLAIMS

What is claimed is:

1. An apparatus for recording multi-angle motion picture data on an information storage medium, the apparatus comprising:
 - a recording unit which records motion picture data for different angles which are interleaved with respect to each other, on the information storage medium, wherein motion picture data for each angle has a plurality of access points through which motion picture data for another angle is connectedly and successively reproduced; and
 - a controller which controls the recording unit to record information on the access points on a separate area of the information storage medium from that of the interleaved motion picture data.
2. The apparatus according to claim 1, wherein the controller controls the recording unit to record the information on the access points as part of characteristic information corresponding to the motion picture data for different angles.
3. An apparatus for recording multi-angle motion picture data on an information storage medium, the apparatus comprising:
 - a recording unit which records motion picture data for different angles which are divided and interleaved with respect to each other in interleaved units, on the information storage medium; and
 - a controller which controls the recording unit to record information for accessing from an interleaved unit of motion picture data for an angle to a next interleaved unit of the motion picture data for the angle and/or for accessing from an interleaved unit of motion picture data for an angle to a corresponding next interleaved unit of motion picture data for another angle, on a separate area of the information storage medium from that of the interleaved motion picture data.
4. An apparatus for recording multi-angle motion picture data corresponding to a motion picture on an information storage medium, the apparatus comprising:
 - a recording unit which records clip AV streams corresponding to motion picture data for different angles, the clip AV streams being interleaved with respect to each other, on the information storage medium; and
 - a controller which controls the recording unit to record information on jumping-points of the clip AV streams on a separate area of the information storage medium from that of the

interleaved clip AV streams, wherein the jumping-points are access points through which the motion picture is reproduced from one angle to another angle.

5. The apparatus according to claim 4, wherein the controller controls the recording unit to record the information on the jumping-points as part of clip information corresponding to the clip AV streams.

6. An apparatus for recording multi-angle motion picture data corresponding to a motion picture on an information storage medium, the apparatus comprising:

a recording unit which records a clip AV stream corresponding to motion picture data for different angles that are interleaved with respect to each other, on the information storage medium; and

a controller which controls the recording unit to record information on jumping-points of the clip AV stream on a separate area of the information storage medium from that of the clip AV stream, wherein the jumping-points are access points through which the motion picture is reproduced from one angle to another angle.

7. An apparatus for recording multi-angle motion picture data corresponding to a motion picture on an information storage medium, the apparatus comprising:

a recording unit which records clip AV streams corresponding to motion picture data for different angles, the clip AV streams being interleaved with respect to each other, on the information storage medium; and

a controller which controls the recording unit to record a plurality of clip information corresponding to the clip AV streams in a separate area of the information storage medium from that of the interleaved clip AV streams, wherein each clip information comprises an entry point map comprising information on entry points for random access and information on whether each of the entry points is a jumping-point, wherein the jumping-point is an access point through which the motion picture is reproduced from one angle to another angle.

8. An apparatus for reproducing motion picture data for different angles from an information storage medium, the apparatus comprising:

a reading unit which reads the motion picture data for different angles that are interleaved with respect to each other, from the information storage medium, wherein motion picture data for each angle has a plurality of access points through which motion picture data for another angle is connectedly and successively reproduced; and

a reproduction unit which reproduces the motion picture data for different angles according to information on the access points provided in a separate area of the information storage medium from that of the interleaved motion picture data.

9. An apparatus for reproducing motion picture data for different angles from an information storage medium, the apparatus comprising:

a reading unit which reads the motion picture data for different angles that are divided and interleaved with respect to each other in interleaved units, from the information storage medium; and

a reproduction unit which reproduces the motion picture data for different angles according to access point information provided in a separate area of the information storage medium from that of the interleaved motion picture data, wherein the access point information comprises information for accessing from an interleaved unit of motion picture data for an angle to a next interleaved unit of the motion picture data for the angle and/or for accessing from an interleaved unit of motion picture data for an angle to a corresponding next interleaved unit of motion picture data for another angle.

10. An apparatus for reproducing motion picture data for different angles corresponding to a motion picture from an information storage medium, the apparatus comprising:

a reading unit which reads clip AV streams corresponding to the motion picture data for different angles, the clip AV streams being interleaved with respect to each other, from the information storage medium; and

a reproduction unit which reproduces the clip AV streams according to information on jumping-points of the clip AV streams provided in a separate area of the information storage medium from that of the interleaved clip AV streams, wherein the jumping-points are access points through which the motion picture is reproduced from one angle to another angle.

11. An apparatus for reproducing motion picture data for different angles corresponding to a motion picture from an information storage medium, the apparatus comprising:

a reading unit which reads a clip AV stream corresponding to the motion picture data for different angles that are interleaved with respect to each other, from the information storage medium; and

a reproduction unit which reproduces the clip AV stream according to information on jumping-points of the clip AV stream provided in a separate area of the information storage medium from that of the clip AV stream, wherein the jumping-points are access points through which the motion picture is reproduced from one angle to another angle.

12. An apparatus for reproducing motion picture data for different angles corresponding to a motion picture from an information storage medium, the apparatus comprising:

a reading unit which reads clip AV streams corresponding to the motion picture data for different angles, the clip AV streams being interleaved with respect to each other, from the information storage medium; and

a reproduction unit which reproduces the clip AV streams according to a plurality of clip information corresponding to the clip AV streams provided in a separate area of the information storage medium from that of the interleaved clip AV streams, wherein each clip information comprises an entry point map comprising information on entry points for random access and information on whether each of the entry points is a jumping-point, wherein the jumping-point is an access point through which the motion picture is reproduced from one angle to another angle.